

REMARKS

Claims 1-18 are pending, while claims 3 and 12 are withdrawn from consideration. Claims 1, 2, 5-11, and 14-18 are rejected to. Applicants wish to cordially thank the Examiner for the allowable subject matter indicated with respect to claims 4 and 13, but for their dependence on rejected base claims. Claims 1 and 10 have been canceled, while claims 2, 4, 6-8, 11, 13, and 15-18 have been amended and claims 19-21 are newly added upon entry of the present amendment. No new matter has been added.

Election/Restrictions

Applicants acknowledge that claims 3 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Claim Rejections -35 USC §102

Claims 1, 2, 6-11, and 15-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Roger, et al. (U.S. Patent No. 5,894,257). Applicant respectfully traverse.

The Examiner alleges that Roger, et al. discloses strap (51, 52), flux return component 20, tube 40, stator 60, plunger 70, coil 50, spring 80, and means 74 for limiting further translation of the plunger away from the stator and that the breaker contact arm and latching mechanism are inherent in Roger, et al.

Claims 1 and 10, from which claims 2, 6-9, and 15-18 depend, have been canceled rendering any rejection thereto moot. Furthermore, claims 4 and 13 have been rewritten in independent form including all of the limitations of the base claim, i.e., claims 1 and 10, respectively, as claims 4 and 13 have been indicated as containing allowable subject matter over the prior art.

Accordingly, it is respectfully requested that the rejection with respect to claims 2, 6-9, and 15-18 be withdrawn.

Claim Rejections - 35 USC §103

Claims 5 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Roger in view of Seymour, et al. (U.S. Patent No. 5,453,724) or Findley, Jr. (U.S.

Patent No. 3,629,747). Applicants respectfully traverse.

The Examiner alleges that Roger does not disclose complementary conically shaped plunger and stator surfaces. However, the Examiner alleges that Seymour, et al., or Findley, Jr., discloses complementary conically shaped plunger and stator surfaces, an equivalent structure known in the art. The Examiner concludes that therefore, because these two configurations were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute complementary conically shaped plunger and stator surfaces in Roger.

It is respectfully noted that claim 5 depends from claim 4 while claim 14 depends from claim 13, both of which are allowable over the prior art as discussed above.

Furthermore, both Seymour et al. and Findley, Jr. teach away from non-planar mating pole faces, as both disclose planar pole faces on at least a portion of the mating pole faces of the plunger and the stator. More specifically, Findley et al. disclose that armature 92 is generally truncated conical in configuration which is complementary to the shape of the recess (stator). Col. 5, lines 21-24 and FIG. 4. Likewise, Seymour et al. disclose with respect to FIGS. 4 and 5 thereof plunger 32 having a conical end 35 and a complimentary funnel-shaped slot 38 shown in FIG. 4 which receives the conical end 35 formed on the plunger 32. Furthermore, plunger 32 and diverter 37 each show planar mating surfaces outboard defining conical end 35 and diverter 37.

Thus, Findley et al. and Seymour et al. teach away from mating pole faces of said plunger and said stator are non-planar and complementary configured with respect to each other, said complementary configured mating pole faces of said plunger and said stator are non-planar relative to a plane orthogonal to a direction of travel of said plunger, as in newly added claim 19. Accordingly, newly added claim 19, including claims depending therefrom, i.e., claims 20 and 21, define over Roger in view of Seymour et al. or Findley, Jr.

Conclusion

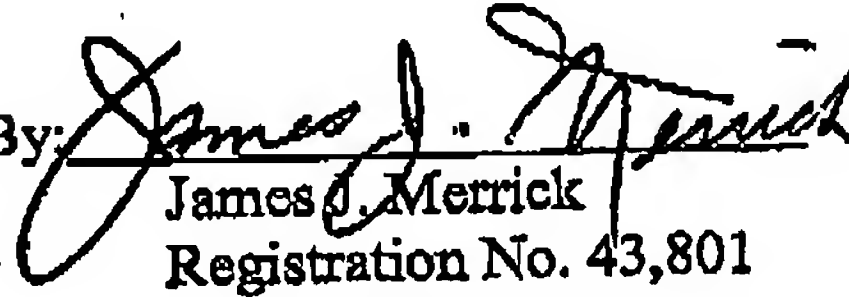
Applicants believe that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein are allowable to Applicants. In view of the foregoing points that distinguish Applicants' invention from those of the prior art and render Applicants' invention not obvious, Applicants respectfully request that the Examiner reconsider the present application, remove the rejections, and allow the application to issue.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is invited to telephone the undersigned.

If any fees are due in connection with this Amendment, or otherwise, Applicants' attorneys authorize that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: 
James J. Merrick
Registration No. 43,801
Confirmation No. 6575
PTO Customer No. 23413

Date: March 3, 2003
Address: 55 Griffin Road South
Bloomfield, CT 06002
Telephone: 860-286-2929